



APRIL 2013

Tropical Knowledge Economy Initiatives

TROPICAL KNOWLEDGE ECONOMY

Opportunities for Tropical Knowledge Economy

The global tropical product is projected to reach US\$40 trillion, twenty times Australia's projected GDP, by 2025¹. Up to 30 per cent will be spent on importing goods and services and more on developing new industries.

As one of the few developed tropical economies in the world, our tropical knowledge and expertise, infrastructure and research capabilities are now uniquely positioned to deliver targeted and field-tested products and services to tropical economies across the world. Opportunity exists for university, research institutions, not-for-profit entities, industry and key economic and business agencies to collaborate to form stronger strategic alliances and to develop a clear framework for the building of an export focused tropical knowledge economy in Northern Queensland.

Coordinated responses to major opportunities and service solutions can be delivered to international Governments as a result of closer working relationships between businesses and industry, and academic and research institutions and a clear framework for building an export focused tropical knowledge economy in Northern Queensland.

Developing a tropical knowledge economy is the key to greater diversification in our economic base and it can be achieved by building the relationships required, packaging up knowledge into an exportable product and tailoring it to meet the needs of developing tropical regions, particularly PNG, Indonesia, Pacific Nations, Myanmar and China. Opportunities exist for the application and uptake of our tropical knowledge economy across northern Australia.

North Queensland (NQ) is a recognised powerhouse of tropical knowledge and expertise with further opportunity to strengthen existing capacity and capability of the region's institutions, businesses and organisations.

Tropical knowledge and expertise in Northern Queensland encompasses a vast range of sectors including tropical medicine and health, education, agriculture, infrastructure, mining and disaster management.

Tropical Knowledge will diversify the economy and drive productivity in our existing industries including tourism, manufacturing and professional services.

It will also boost productivity and innovation through existing policy opportunities, for example:

- Renewable energy and ARENA – Ergon Energy's Test and Demonstration Centre and Port Bajool's Asia Pacific Energy Innovation Centre
- James Cook University (JCU) – Australia Institute for Tropical Health & Medicine
- The Cairns Institute – exploration of university to region partnerships
- Rainforest & Reef Research Centre (RRRC) exploration of region to region development models with PNG communities
- Austropex – Business to Business brokerage arrangements and commercialisation
- Core research capacity – collaboration among regional partners to build a stronger international and northern Australia environment, agriculture and natural resources research, innovation and education capacity

Core investment in the capacity of, and partnerships between key delivery institutions is required in conjunction with the development of a framework for the tropical knowledge economy.

¹ Trade and Investment Qld, <http://www.export.qld.gov.au/tropical-expertise.html>

Benefits of a Tropical Knowledge Economy

- Diversify economic base
- Strengthen existing capacity and capability
- Improve productivity
- Maximise innovation and commercialisation
- Position Northern Queensland and Australia as a world leader in tropical knowledge and innovation
- Bring multiple benefits across a range of sectors: health, agriculture, energy etc
- Build knowledge, training and skills facilitation – increasing the available skilled workforce





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Where to from here:

Strategic initiatives, which span Northern Queensland and will support the tropical knowledge economy, are as follows:

Action	What's needed	Benefits to our communities and regional economies
Tropical Innovation and Knowledge Centre (TKIC)	<p>TKIC will be not only the largest data centre in Australia north of Brisbane, it will also promote 21st century knowledge exchange to</p> <p>(a) promote the capture and sharing of tropical knowledge across the world,</p> <p>(b) provide telecommunications links and leverage NBN and high speed broadband to drive online business opportunities and</p> <p>(c) provide hub and spoke services throughout the Northern Queensland region and beyond.</p> <p>Investment of \$8.9M to support the development of a tropical innovation zone to connect businesses, researchers, innovators and markets across Northern Queensland, northern Australia and tropical countries.</p>	<ul style="list-style-type: none"> • Economic and employment impact through construction and operations • Engagement of Northern Queensland companies and communities in the digital economy • Connectivity with the tropical economies of the world
Tropical Knowledge Economy Framework	<p>Office of Prime Minister and Cabinet (Asian Century Group) in partnership with the Northern Queensland RDAs develop a clear framework for building an export focused tropical knowledge economy in Northern Queensland.</p>	<ul style="list-style-type: none"> • Support increased economic resilience and diversification • Improve innovation in economic pillars • Drive export of tropical knowledge and products including natural resource management services tropical architecture, health service delivery for remote areas, mining knowledge and agriculture and beef industry expertise.





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Action	What's needed	Benefits to our communities and regional economies
AUSAID in Northern Queensland: delivering Aid to the Tropics from the Tropics leading to high costs of travel.	Locate an AusAid office in Northern Queensland initially with Pacific functions.	<ul style="list-style-type: none"> • Improve effective service delivery to the Pacific region, particularly PNG (cost savings and greater policy outcomes) • Facilitate the purchase of multiple services from Northern Queensland by international NGOs and Government (at all levels) • Drive tropical knowledge relationships across the region
Maximising Commercialisation	<p>Build strategic approach to deliver new pathways to commercialisation for Northern Queensland innovations.</p> <p>Develop a framework to support partnership approaches between research institutions, industry, Commercialisation Australia, IP Australia and other relevant southern Australia institutions.</p> <p>Australian Government and Queensland Government commitment of \$600k to develop framework.</p>	<ul style="list-style-type: none"> • Delivery of tangible benefits from commercialisation of Northern Queensland products, ideas, knowledge and concepts.





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Examples of projects that would support the strategic initiatives include:

- **Growing the University to Government Partnership model**
Advance the JCU model around capacity building and education/training alliances between Government departments and universities, as well as from university to university, leading to increased Northern Queensland participation in Australian Aid delivery
- **Business to Business tropical knowledge exchange, innovation, outreach and commercialization**
One-off investment to support SMEs connecting with Asia-Pacific and development of a model to take tropical innovation to export markets
- **Re-booting regional environmental research**
Recasting the National Environmental Research Program (NERP) investment model to establish regionally-oriented stakeholder and research provider partnerships for sustainable regional development associated with the management of Northern Queensland's natural assets
- **Tropical Expertise Hubs**
JCU Australia Institute for Tropical Health and Medicine
Emergency Management Expertise Hub
- **PNG: Region to Region Development Model**
Tangible exportable model for community development adapted to cultural needs of communities across the tropics
- **Regional-Remote Area Renewable Energy Technology Centre**
Ergon Energy Renewable Energy Centre of Excellence and Commercialisation Hub
- **Regional Assessment Models**
Development of independent, regional social impact assessment capacity in new development and regional major project coordination and facilitation

WHO WE ARE

The role of Regional Development Australia Committees is to work across all three levels of Government, local industry and their regional communities to enhance the growth and development of regions across Australia. This includes the identification and advocacy of agreed regional priorities; and working in collaboration with regional partners to strengthen each region's long-term sustainability for the long-term benefit of future generations.

www.rda.gov.au

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